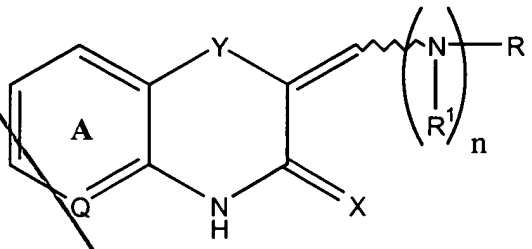
CLAIMS

What is claimed is:

1. A method of inhibiting one or more protein kinase activity comprising the administration of a compound represented by the formula:



and physiologically acceptable salts thereof, wherein:

ring A is substituted or unsubstituted;

Q is -N= or -CR^2=;

X is S, O, or NOR^3;

Y is -O-, -S-, -SO- or -SO_2-;

R and R^1 are each, independently, hydrogen or a substituted or unsubstituted aliphatic, aromatic, or aralkyl group;

R^2 is -H or a substitutent;

R^3 is -H or -$C(O)R^4$;

R^4 is a substituted or unsubstituted aliphatic, aromatic, or aralkyl group; and

n is an integer from 0 to 1.

2. A method of Claim 1, wherein the compound is a mixture of stereoisomers.

3. A method of Claim 2, wherein the stereoisomers are enantiomers.

4. A method of Claim 2, wherein the stereoisomers are E and Z isomers.

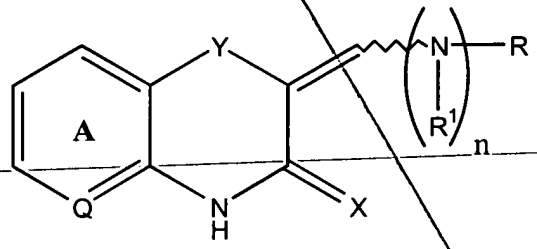
5. A method of Claim 1, wherein the compound is a mixture of structural isomers.

6. A method of Claim 5, wherein the structural isomers are tautomers.

7. A method of Claim 1, wherein said protein kinase is either a receptor tyrosine kinase or a non-receptor tyrosine kinase.

8. A method of Claim 7, wherein said tyrosine kinase is selected from the group consisting of KDR, flt-1, TIE-2, Lck, Src, fyn, Lyn, Blk, and yes.

9. A method of treating a hyperproliferative disorder in a recipient which comprises administering to said recipient an effective amount of a compound of the formula:



and physiologically acceptable salts thereof, wherein:

ring A is substituted or unsubstituted;

Q is -N= or -CR^2=;

X is S, O, or NOR^3;

Y is -O-, -S-, -SO- or -SO_2-;

R and R^1 are each, independently, hydrogen or a substituted or unsubstituted aliphatic, aromatic, or aralkyl group;

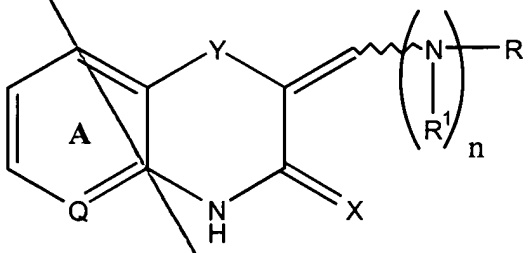
R^2 is -H or a substitutent;

R^3 is -H or -$C(O)R^4$;

R^4 is a substituted or unsubstituted aliphatic, aromatic, or aralkyl group; and

n is an integer from 0 to 1.

10. A method of affecting angiogenesis in a recipient which comprises administering to said recipient an effective amount of a compound of formula:



and physiologically acceptable salts thereof, wherein:

ring A is substituted or unsubstituted;

Q is -N= or -CR^2=;

X is S, O, or NOR^3;

Y is -O-, -S-, -SO- or -SO_2-;

R and R^1 are each, independently, hydrogen or a substituted or unsubstituted aliphatic, aromatic, or aralkyl group;

R^2 is -H or a substitutent;

R^3 is -H or -$C(O)R^4$;

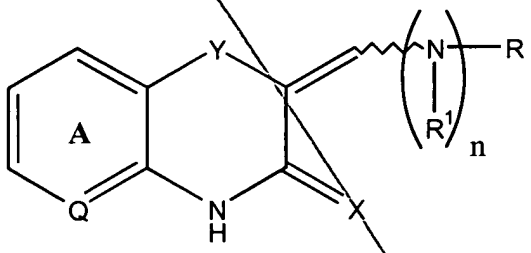
R^4 is a substituted or unsubstituted aliphatic, aromatic, aralkyl group; and

n is an integer from 0 to 1.

11. The method of Claim 10, wherein the affect in said recipient is an anti-angiogenic affect.

12. A method of treating a disease in a mammal in need thereof, wherein said disease is selected from the group consisting of cancer, arthritis, atherosclerosis, psoriasis, hemangioma, myocardial angiogenesis, coronary and cerebral

collateral vascularization, ischemic limb angiogenesis, corneal disease, rubeosis, neovascular glaucoma, macular degeneration, retinopathy of prematurity, wound healing, ulcers, *Helicobacter* related diseases, fractures, endometriosis, diabetic retinopathy, cat scratch fever, thyroid hyperplasia, burns, trauma, acute lung injury, chronic lung disease, stroke, polyps, cysts, synovitis, chronic and allergic inflammation, ovarian hyperstimulation syndrome, pulmonary and cerebral edema, keloid, fibrosis, cirrhosis, carpal tunnel syndrome, sepsis, adult respiratory distress syndrome, multiple-organ dysfunction syndrome, ascites and tumor-associated effusions and edema, comprising the step of administering a compound of formula (I):



and physiologically acceptable salts thereof, wherein:

ring A is substituted or unsubstituted;

Q is -N= or -CR^2=;

X is S, O, or NOR^3;

Y is -O-, -S-, -SO- or -SO_2-;

R and R^1 are each, independently, hydrogen or a substituted or unsubstituted aliphatic, aromatic, or aralkyl group;

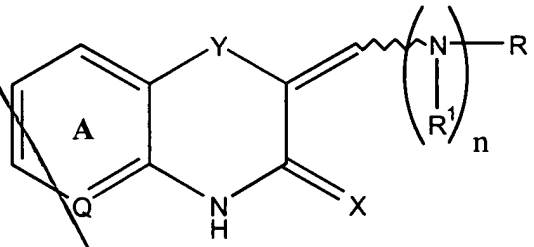
R^2 is -H or a substitutent;

R^3 is -H or -$C(O)R^4$;

R^4 is a substituted or unsubstituted aliphatic, aromatic, or aralkyl group; and

n is an integer from 0 to 1.

13. A method of inhibiting vascular hyperpermeability or the production of edema in a recipient which comprises administering to said recipient an effective amount of a compound of formula:



and physiologically acceptable salts thereof, wherein:

ring A is substituted or unsubstituted;

Q is -N= or -CR^2=;

X is S, O, or NOR^3;

Y is -O-, -S-, -SO- or -SO_2-;

R and R^1 are each, independently, hydrogen or a substituted or unsubstituted aliphatic, aromatic, or aralkyl group;

R^2 is -H or a substitutent;

R^3 is -H or -C(O)R^4;

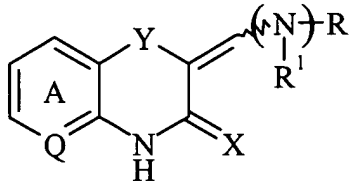
R^4 is a substituted or unsubstituted aliphatic, aromatic, aralkyl group; and

n is an integer from 0 to 1.

14. The method of Claim 1, wherein said protein kinase is a serine kinase.

15. The method of Claim 1, wherein said protein kinase is a threonine kinase.

16. A compound represented by the following structural formula:



and physiologically acceptable salts thereof, wherein:

ring A is substituted or unsubstituted;

Q is -N= or -CR^2=;

X is S, O, or NOR^3;

Y is -O-, -S-, -SO- or -SO_2-;

R^2 is -H or a substituent;

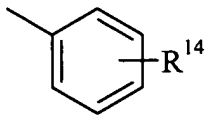
R^3 is -H or -$C(O)R^4$;

R^4 is a substituted or unsubstituted aliphatic or aromatic group;

n is 0 or 1;

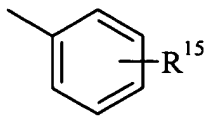
when X is S or NOR^3, R is a substituted or unsubstituted aromatic or aralkyl group and R^1 is hydrogen or a substituted or unsubstituted aliphatic group;

when X is O and n is 0, R^1 is hydrogen or a substituted or unsubstituted aliphatic group and R is a substituted or unsubstituted aromatic or aralkyl group, provided that R is not thiophenyl, benzoxadiazolyl, 3-furanyl, 3-pyridinyl or



where R^{14} is H, CF_3, phenyl, -OCH_3, -O-phenyl, NO_2 or -$OC(O)CH_3$; and

when X is O and n is 1, R^1 is H or a substituted or unsubstituted aliphatic group and R is a substituted or unsubstituted aromatic or aralkyl group, provided that R is not



A1 cont

where R^{15} is H, Cl, CH_3 or CF_3.

17. A compound of Claim 16, wherein the aromatic group and the aromatic portion of the aralkyl group defined for R is a heteroaryl group.

18. A compound of Claim 17 wherein n is 0 and R is selected from the group consisting of substituted or unsubstituted indole, pyrrole, 7-azaindole, pyrazole, imidazole and indazole.

19. A compound of Claim 16, wherein n is 1 and R is selected from the group consisting of substituted or unsubstituted indole, pyrazolyl, phenyl, triazolyl, pyridyl and indazolyl.

20. A compound of Claim 18, wherein Q is CH_2; Y is O or S; and R is selected from the group consisting of substituted or unsubstituted pyrrole, pyrazole, imidazole, oxazole, isoxazole, thiazole, isothiazole, triazole, tetrazole, indole, 7-azaindole, indazole, purine, pyrrolo-pyrimidine, pyrazolo-pyrimidine, imidazo-pyridine, imidazo-pyrimidine, imidazo-pyridine, pyrrolo-pyridine, pyrrolo- pyridine, pyrrolo-quinoline, pyrrolo-pyrazine, 6,7,8,9-tetrahydropyrido-indole and tetrahydrofuran.

A2 push

21. A compound according to Claim 20, wherein R is selected from the group consisting of substituted or unsubstituted pyrrole, pyrazole, imidazole, oxazole, isoxazole, thiazole, isothiazole, triazole, tetrazole, indole, 7-azaindole, indazole, purine, pyrrolo[2,3-d]pyrimidine, pyrazolo[3,4-d]pyrimidine, imidazo[4,5-b]pyridine, imidazo[1,2-a]pyrimidine, imidazo[1,2-a]pyridine, pyrrolo[3,2-b]pyridine, pyrrolo[3,2-c]pyridine, pyrrolo[2,3-c] pyridine, pyrrolo[3,2-b]quinoline, pyrrolo[2,3-b]pyrazine, 6,7,8,9-tetrahydropyrido[1,2-a]indole, and tetrahydrofuran.

B1 cont

22. A compound of Claim 21 wherein R is optionally substituted with one or more moieties selected from the group consisting of halogens, trihalomethyl, cyano, hydroxy, nitro, $-NR^5R^6$, carbamoyl, carboxy, carboxamidoxime, $-SO_2NR^5R^6$, $-NHSO_2R^5$, R^7-O-R^8-, R^7-O-R^8-O-R^9-, R^{11}-, $R^{11}O$-, $R^{11}OC(O)$-, $R^{11}N(R^5)C(O)$-, $R^{11}C(O)$-, $R^{11}C(O)O$-, $R^{11}S$-, $R^{11}S(O)$-, $R^{11}S(O)_2$-, $(R^5R^6)NC(O)$-, $R^{11}(R^5)NC(O)N(R^5)$-, $R^{11}C(O)N(R^5)$-, $R^{12}(CH_2)_m$-, $R^{12}(CH_2)_mC(O)N(R^5)$-, $R^{12}(CH_2)_mO$-, $R^{12}(CH_2)_mN(R^5)$-, $[R^{12}(CH_2)_m]_2CH$-O-$(CH_2)_m$-, $R^{12}(CH_2)_mOC(O)$-, $R^{12}(CH_2)_mN(R^5)C(O)$-, $R^{12}(CH_2)_mCH(R^{12})(CH_2)_m$-, $R^{12}(CH_2)_mC(O)O$-, $R^{12}(CH_2)_mN(R^5)C(O)O$-, $R^{12}(CH_2)_mOC(O)N(R^5)$-, $R^{12}(CH_2)_mOC(O)O$-, $R^{12}(CH_2)_mN(R^5)C(O)(CH_2)_m$-, $R^{12}(CH_2)_mOC(O)(CH_2)_m$-, $R^{12}(CH_2)_m(CR^5R^6)_m(CH_2)_mN(R^5)(CH_2)_m$-, $R^{12}(CH_2)_mC(O)$-, $R^{12}C(O)(CH_2)_m$-, $R^{12}(CH_2)_m(CR^5R^6)_m(CH_2)_mN(R^5)C(O)(CH_2)_m$-, $R^{12}(CH_2)_m(CR^5R^6)_m(CH_2)_mN(R^5)(CH_2)_mC(O)$-, $[R^{12}(CH_2)_m]_2NC(O)(CH_2)_m$-, $R^{12}(CH_2)_mC(O)$-, $R^{12}(CH_2)_m(CR^5R^6)_m(CH_2)_mN(R^5)SO_2$-, $R^{12}(CH_2)_m(CR^5R^6)_m(CH_2)_mO(CH_2)_m$-,

wherein:

R^5 and R^6 for each occurrence are each independently selected from the group consisting of hydrogen, a lower alkyl, benzyl, heteroarylmethyl and aryl group optionally substituted with a halogen, cyano or hydroxy group;

R^7 for each occurrence is independently selected from the group consisting of hydrogen, $R^{10}C(O)$-, a lower alkyl and an aryl group optionally substituted with one or more halogens, cyano, hydroxy or $-NR^5R^6$;

R^8 and R^9 for each occurrence are each independently selected from the group consisting of -C(O)-, a lower alkyl or an aryl group optionally substituted with one or more halogens, cyano, hydroxy or $-NR^5R^6$;

R^{10} for each occurrence is independently selected from a group consisting of a lower alkyl and an aryl group optionally substituted with one or more halogens, cyano, hydroxy or $-NR^5R^6$;

R^{11} for each occurrence is independently hydrogen or selected from an optionally substituted group consisting of a lower alkyl group, a saturated or unsaturated heterocyclic ring, an aryl group and an aralkyl group, where said groups are optionally substituted with one or more halogens, cyano, hydroxy or $-NR^5R^6$;

R^{12} for each occurrence is independently selected from the group consisting of halogen, carboxy, carbamoyl, lower alkyloxycarbonyl, lower alkenyl, hydroxy, a lower alkyloxy, a lower alcanoyloxy, and $-NR^5R^6$; or is selected from an optionally substituted group consisting of morpholine, piperazine, piperidine, pyrrolidine, homopiperazine, pyridine, triazole, tetrazole, imidazole and tetrahydropyrane, where said groups are optionally substituted with one or more hydroxy, lower alkyl, lower alkyloxy, lower hydroxyalkyl, lower aminoalkyl, lower alkyloxyalkyl, a saturated or unsaturated heterocyclic ring, cycloalkyl or $-NR^5R^6$ group; and

m for each occurrence is independently an integer from 0 to 4.

23. A compound of Claim 22, wherein X is O and n is 0.

24. A compound of Claim 22, wherein X is S.

25. A compound of Claim 22, wherein X is NOR_3.

26. A compound of Claim 23 wherein R is selected from the group consisting of:

pyrrol-2-yl,

5-methylpyrrol-2-yl,

3,5-dimethylpyrrol-2-yl,

4,5-dimethylpyrrol-2-yl,

4-ethyl-3,5-dimethylpyrrol-2-yl,

4-ethoxycarbonyl-3,5-dimethylpyrrol-2-yl,

1-methylpyrrol-2-yl,

1-(4-hydroxybutyl)pyrrol-2-yl,
1-(2-hydroxyethyl)pyrrol-2-yl,
1-(3-dimethylaminopropyl)pyrrol-2-yl,
4-bromopyrrol-2-yl,
1-[N-(2-morpholinoethyl)carbamoylmethyl]pyrrol-2-yl,
1-(ethoxycarbonylmethyl)pyrrol-2-yl,
1-(carboxymethyl)pyrrol-2-yl,
1-[N-(3-dimethylaminopropyl)carbamoylmethyl]pyrrol-2-yl,
1-[(4-methylpiperazin-1-yl)carbonylmethyl]pyrrol-2-yl,
indol-3-yl,
1-(4-hydroxybutyl)indol-3-yl,
5-methoxyindol-3-yl,
1-(2-hydroxyethyloxymethyl)indol-3-yl,
1-(3-dimethylaminopropyl)indol-3-yl,
6-methoxycarbonylindol-3-yl,
2-methylindol-3-yl,
1-methylindol-3-yl,
1-isopropylindol-3-yl,
1-(2-hydroxy-3-dimethylaminopropyl)indol-3-yl,
5-hydroxyindol-3-yl,
6-carboxyindol-3-yl,
5-amino-2-methylindol-3-yl,
6-(2-dimethylaminoethyloxycarbonyl)indol-3-yl,
6-(2-morpholinoethyloxycarbonyl)indol-3-yl,
6-(3-dimethylaminopropylcarbamoyl)indol-3-yl,
1-(carbamoylmethyl)indol-3-yl,
8-hydroxymethyl-6,7,8,9-tetrahydropyrido[1,2-a]indol-10-yl,
1-(ethoxycarbonylmethyl)indol-3-yl,
4-methoxycarbonylindol-3-yl,

1-(2-ethoxycarbonylethyl)indol-3-yl,
7-methoxycarbonylindol-3-yl,
2-ethoxycarbonylindol-3-yl,
1-cyclopentylindol-3-yl,
1-(3-tetrahydrofuranyl)indol-3-yl,
6-(N,N-dimethylaminosulfonyl)indol-3-yl,
5-(acetylaminomethyl)indol-3-yl,
1-(diethylcarbamoyl)indol-3-yl,
5-hydroxy-1-methylindol-3-yl,
6-methoxyindol-3-yl,
6-hydroxyindol-3-yl,
6-[2-(pyrrolidin-1-yl)ethyloxycarbonyl]indol-3-yl,
6-(2-dimethylaminoethyloxycarbonyl)-1-methylindol-3-yl,
6-(3-dimethylaminopropyloxycarbonyl)indol-3-yl,
6-carboxy-1-(2-hydroxyethyl)indol-3-yl,
6-{N-[2-(pyrrolidin-1-yl)ethyl]carbamoyl}indol-3-yl,
6-[N-(2-morpholinoethyl) carbamoyl]indol-3-yl,
6-[N-(2-dimethylaminoethyl)carbamoyl]indol-3-yl,
6-{N-[3-(4-methylpiperazin-1-yl)propyl]carbamoyl}indol-3-yl,
6-{N-[2-(piperidin-1-yl)ethyl]carbamoyl}indol-3-yl,
6-[N- (2-dimethylaminopropyl)carbamoyl]indol-3-yl,
6-{[N-(2-dimethylaminoethyl)-N-methyl]carbamoyl}indol-3-yl ,
6-[(4-methylpiperazin-1-yl)carbonyl]indol-3-yl,
5-[2-(piperidin-1-yl)ethyloxy]indol-3-yl,
5-(3-dimethylaminopropyloxy)indol-3-yl,
5-(2-morpholinoethyloxy) indol-3-yl,
5-(3-dimethylaminopropyloxy)-1-(isopropyloxycarbonyl)indol-3-yl,
5-(3-dimethylaminopropyloxy)-1-methylindol-3-yl,
5-(2-morpholinoethyloxy)-1-methylindol-3-yl,

5-[2-(pyrrolidin-1-yl)ethyloxy]indol-3-yl,
5-(2-dimethylaminoethyloxy)indol-3-yl,
6-(3-dimethylaminopropyloxy)indol-3-yl,
6-(2-morpholinoethyloxy)indol-3-yl,
6-[2-(piperidin-1-yl)ethyloxy]indol-3-yl,
6-[2-(pyrrolidin-1-yl)ethyloxy]indol-3-yl,
6-(2-dimethylaminoethyloxy)indol-3-yl,
6-[(2-dimethylamino-2-methyl)propyloxy]indol-3-yl,
6-[2-(1-methylpyrrolidin-2-yl)ethyloxy]indol-3-yl,
6-[2-(1-methylpiperidin-3-yl)methyloxy]indol-3-yl,
7-(dimethylaminomethyl)-6-hydroxyindol-3-yl,
7-(dimethylaminomethyl)-6-(2-morpholinoethyloxy)indol-3-yl,
2-methyl-5-(N′-ethylureido)indol-3-yl,
2-methyl-5-(p-toluensulfonylamino)indol-3-yl,
6-[(3-dimethylaminopropyl)aminomethyl]indol-3-yl,
6-[(2-methoxyethyl)aminomethyl]indol-3-yl,
1-(carboxymethyl)indol-3-yl,
1-[N-(2-morpholinoethyl)carbamoylmethyl]indol-3-yl,
1-[N-(2-methoxyethyl)carbamoylmethyl]indol-3-yl,
1-[N-(3-dimethylaminopropyl)carbamoylmethyl]indol-3-yl,
1-{N-(2-(2-pyridyl)ethyl) carbamoylmethyl]indol-3-yl,
1-{N-[2-(pyrrolidin-1-yl)ethyl]carbamoylmethyl}indol-3-yl,
7-[N-(3-dimethylaminopropyl)carbamoyl]indol-3-yl,
1-[(4-methylpiperazin-1-yl)carbonylmethyl]indol-3-yl,
1-[N,N-bis(2-N′,N′-diethylaminoethyl)carbamoylmethyl]indol-3-yl,
1-[(4-piperidinopiperidin-1-yl)carbonylmethyl]indol-3-yl,
1-{[N-(2-N′,N′-diethylaminoethyl)-N-methyl]carbamoylmethyl}indol-3-yl,
7-carboxyindol-3-yl,

7-[(4-methylpiperazin-1-yl)carbonyl]indol-3-yl,
7-{[4-(2-hydroxyethyl)piperazin-1-yl]carbonyl}indol-3-yl,
7-azaindol-3-yl,
1-(4-hydroxybutyl)-7-azaindol-3-yl,
1-(2-hydroxyethyloxymethyl)-7-azaindol-3-yl,
1-(3-dimethylaminopropyl)-7-azaindol-3-yl,
1-(2-morpholinoethyl)-7-azaindol-3-yl,
1-(4-acetoxybutyl)-7-azaindol-3-yl,
1-(2-hydroxyethyl)-7-azaindol-3-yl,
1-methyl-7-azaindol-3-yl,
1-methoxymethyl-7-azaindol-3-yl,
1-(2-dimethylaminomethyl)-7-azaindol-3-yl,
1-(ethoxycarbonylmethyl)-7-azaindol-3-yl,
1-[N-(2-morpholinoethyl)carbamoylmethyl] -7-azaindol-3-yl,
1-carboxymethyl-7-azaindol-3-yl,
1-{N-[3-(4-methylpiperazin-1-yl)propyl]carbamoylmethyl}-7-azaindol-3-yl,
1-[(4-methylpiperazin-1-yl)carbamoylmethyl]-7-azaindol-3-yl,
1-{[N-(2-N′,N′-diethylaminoethyl)-N-methyl]carbamoylmethyl}-7-azaindol-3-yl,
1-{[N-(1-ethylpyrrolidin-2-yl)methyl]carbamoylmethyl}-7-azaindol-3-yl,
1-[(4-methylhomopiperazin-1-yl)carbonylmethyl]-7-azaindol-3-yl,
1-[(4-ethylpiperazin-1-yl)carbonylmethyl]-7-azaindol-3-yl,
1-[(4-piperidinopiperidin-1-yl)carbonylmethyl]-7-azaindol-3-yl,
1-[N,N-bis(2-N′,N′-diethylaminoethyl)carbamoylmethyl]-7-azaindol-3-yl,
7-benzyloxy pyrrolo[2,3-c]pyridin-5-yl,
7-hydroxy pyrrolo[2,3-c]pyridin-5-yl,
1-(2-dimethylaminoethyl)-7-hydroxy pyrrolo[2,3-c]pyridin-5-yl,

imidazol-2-yl,
4-trifluoromethylimidazol-2-yl,
4-cyanoimidazol-2-yl,
1-methyl-1H-benzo[d]imidazol-2-yl,
imidazol-5-yl,
4(5)-methylimidazol-5(4)-yl,
2-methylimidazol-5-yl,
2-ethyl-4(5)-methylimidazol-5(4)-yl,
3-(2-diethylaminoethyl)-4-methylimidazol-5-yl,
1-(2-diethylaminoethyl)-4-methylimidazol-5-yl,
1-(2-morpholinoethyl)-4-methylimidazol-5-yl,
3-(2-morpholinoethyl)-4-methylimidazol-5-yl,
1-methyl-2-methylthioimidazol-5-yl,
4(5)-methoxycarbonylimidazol-5(4)-yl,
4(5)-hydroxymethylimidazol-5(4)-yl,
furan-3-yl,
3-methylpyrazol-4-yl,
3-phenylpyrazol-4-yl,
1-(2-diethylaminoethyl)-3-methylpyrazol-4-yl,
1-(2-diethylaminoethyl)-5-methylpyrazol-4-yl,
1-(2-morpholinoethyl)-3-methylpyrazol-4-yl,
1-(2-morpholinoethyl)-5-methylpyrazol-4-yl,
1-methylpyrazol-4-yl,
1-tert-butylpyrazol-4-yl,
1-ethoxycarbonylmethyl-3-methylpyrazol-4-yl,
1-ethoxycarbonylmethyl-5-methylpyrazol-4-yl,
1-carboxymethyl-3-methylpyrazol-4-yl,
1-carboxymethyl-5-methylpyrazol-4-yl,
1-[N-(2-dimethylaminoethyl)carbamoylmethyl]-3-methylpyrazol-4-yl,

1-{N-[3-(4-methylpiperazin-1-yl)propyl]carbamoylmethyl}-3-methylpyrazol-4-yl,

1-[N-(2-dimethylaminoethyl)carbamoylmethyl]-5-methylpyrazol-4-yl,

1-[N-(2-morpholinoethyl)carbamoylmethyl]-3-methylpyrazol-4-yl,

1-[(4-piperidinopiperidin-1-yl)carbonylmethyl]-3-methylpyrazol-4-yl,

1-{[N-(2-N′,N′-diethylaminoethyl)-N-methyl]carbamoylmethyl}-3-methylpyrazol-4-yl,

1-[(4-methylpiperazin-1-yl)carbonylmethyl]-5-methylpyrazol-4-yl,

1-[(4-methylpiperazin-1-yl)carbonylmethyl]-3-methylpyrazol-4-yl,

1-{N-[3-(imidazol-1-yl)propyl]carbamoylmethyl}-3-methylpyrazol-4-yl,

1-{[4-(2-hydroxyethyl)piperazin-1-yl]carbonylmethyl}-5-methylpyrazol-4-yl,

1-{[4-(2-(2-hydroxyethoxy)ethyl)piperazin-1-yl]carbonylmethyl}-5-methylpyrazol-4-yl,

indol-2-yl,

pyrrol-3-yl,

indazol-3-yl,

thiazol-2-yl,

pyrazol-3-yl,

5(3)-ethoxycarbonylpyrazol-3(5)-yl,

5(3)-[N-(2-morpholinoethyl)carbamoyl]pyrazol-3(5)-yl,

5(3)-[N-(2-methoxyethyl)carbamoyl]pyrazol-3(5)-yl,

5(3)-{N-[2-(pyrrolidin-1-yl)ethyl]carbamoyl}pyrazol-3(5)-yl,

5(3)-[N-(3-dimethylaminopropyl)carbamoyl] pyrazol-3(5)-yl,

2-(dimethylamino)thiazol-5-yl,

indol-4-yl,

3-(morpholinomethyl)indol-4-yl,

indol-7-yl,

3-(dimethylaminomethyl)indol-7-yl,

3-(morpholinomethyl)indol-7-yl,
3-(piperidinomethyl)indol-7-yl,
3-[(4-methylpiperazin-1-yl)methyl]indol-7-yl,
3,5-dimethyl-4-dimethylaminomethylpyrrol-2-yl,
4-carboxyimidazol-2-yl,
7-{N-[3-(imidazol-1-yl)propyl]carbamoyl}indol-3-yl,
7-{N-[3-(4-methylpiperazin-1-yl)propyl]carbamoyl}indol-3-yl,
7-[N- (2-dimethylaminopropyl)carbamoyl]indol-3-yl,
7-{N-[2-(pyrrolidin-1-yl)ethyl]carbamoyl}indol-3-yl,
7-[(4-ethylpiperazin-1-yl)carbonyl]indol-3-yl,
7-[(4-methylhomopiperazin-1-yl)carbonyl]indol-3-yl,
3-{[4-(2-hydroxyethyl)piperazin-1-yl]methyl}indol-7-yl,
3-[(4-hydroxypiperidin-1-yl)methyl]indol-7-yl,
1-[(piperazin-1-yl)carbonylmethyl]-7-azaindol-3-yl,
1-[(piperazin-1-yl)carbonylmethyl]indol-3-yl,
1-[(piperazin-1-yl)carbonylmethyl]-3-methyl-1H-pyrazol-4-yl,
1-{N-[2-(pyrrolidin-1-yl)ethyl]carbamoylmethyl]-3-methyl-1H-pyrazol-4-yl,
1-[N-(2-dimethylaminopropyl)carbamoylmethyl]-3-methyl-1H-pyrazol-4-yl,
3-(2-dimethylaminoacetyl)indol-7-yl,
6-[(2-morpholinoethyl)aminomethyl]indol-3-yl,
6-{[2-(pyrrolidin-1-yl)ethyl]aminomethyl]}indol-3-yl,
6-[(3-methoxycarbonylpropyl)oxy]indol-3-yl,
6-{[(3-(4-methylpiperazin-1-yl)carbonyl]propyloxy}indol-3-yl,
6-{3-[N-(2-dimethylaminoethyl)-N-methylcarbamoyl]propyloxy}indol-3-yl,
6-[(2-hydroxyethyl)oxymethyloxy]indol-3-yl,
6-{3-[(4-piperidinopiperidin-1-yl)carbonyl]propyloxy}indol-3-yl,

6-{3-{[4-(2-hydroxyethyl)piperazin-1-yl]carbonyl}propyloxy}indol-3-yl,
6-[(4-methylpiperazin-1-yl)methyl]indol-3-yl,
6-{[N-(2-dimethylaminoethyl)-N-methyl]aminomethyl}indol-3-yl,
7-(dimethylaminomethyl)-6-(2-methoxyethyloxy)indol-3-yl,
7-(dimethylaminomethyl)-6-(3-methoxycarbonylpropyloxy)indol-3-yl,
7-(dimethylaminomethyl)-6-{[3-(4-methylpiperazin-1-yl)carbonyl]propyloxy}indol-3-yl,
7-(dimethylaminomethyl)-6-[(2-hydroxyethyl)oxymethyloxy]indol-3-yl,
6-(2-methoxyethyloxy)-7-[(pyrrolidin-1-yl) methyl]indol-3-yl,
6-{[3-(4-methylpiperazin-1-yl)carbonyl]propyloxy}-7-[(pyrrolidin-1-yl) methyl]indol-3-yl,
6-[(2-hydroxyethyl)oxymethyloxy]-7-[(pyrrolidin-1-yl)methyl]indol-3-yl,
7-[[(pyrrolidin-1-yl)methyl]-6-{[2-(pyrrolidin-1-yl)ethyl]oxy}indol-3-yl,
6-[2-(pyrrolidin-1-yl)ethyloxy]-7-azaindol-3-yl,
6-(2-piperidinoethyloxy)-7-azaindol-3-yl,
6-[(2-dimethylamino-2-methyl)propyloxy]-7-azaindol-3-yl,
6[(2-hydroxyethyl)aminomethylcarbonyl]indol-3-yl,
6-{[2-(pyrrolidin-1-yl)ethyl]aminomethylcarbonyl}indol-3-yl,
6-[(2-diethylaminoethyl)aminomethylcarbonyl]indol-3-yl,
4-carbamoylimidazol-2-yl,
4(5)-methyl-2-(methylmercapto)imidazol-5(4)-yl,
4(5)-methyl-2-(methylsulfonyl)imidazol-5(4)-yl,
2-amino-4(5)-methylimidazol-5(4)-yl,
4(5)-dimethylaminomethylimidazol-5(4)-yl,
4(5)-methylaminomethylimidazol-5(4)-yl,
4(5)-diethylaminomethylimidazol-5(4)-yl,
6-(N-methylaminosulfonyl)indol-3-yl,
6-[N-(3-dimethylaminopropyl)sulfonyl]indol-3-yl,
6-{N-[2-(pyrrolidin-1-yl)ethyl]aminosulfonyl}indol-3-yl,

6-{N-[2-piperidinoethyl]aminosulfonyl}indol-3-yl,
6-[N-(2-morpholinoethyl]aminosulfonyl}indol-3-yl,
6-{N-[2-(piperidinomethyl]aminosulfonyl}indol-3-yl,
6-{N-[3-(4-methylpiperazin-1-yl)propyl]aminosulfonyl}indol-3-yl,
7-[N-(2-morpholinoethyl)carbamoyl]indol-3-yl,
7-[N-(2-piperidinoethyl)carbamoyl]indol-3-yl,
7-{[N-(2-N',N'-diethylaminoethyl)-N-methyl]carbamoyl} indol-3-yl,
7-[N-(2-methoxyethyl)carbamoyl]indol-3-yl,
7-[(4-piperidinopiperidin-1-yl)carbonyl]indol-3-yl,
7-[(piperazin-1-yl)carbonyl]indol-3-yl,
7-{N-[(2,2,N',N'-tetramethyl)propyl]carbamoyl}indol-3-yl,
7-{N-[(1-ethylpyrrolidin-2-yl)methyl]carbamoyl}indol-3-yl,
7-{N-[2-(2-pyridyl)ethyl]carbamoyl}indol-3-yl,
6-{N-[2-(2-pyridyl)ethyl]carbamoyl}indol-3-yl,
6-[(4-piperidinopiperidin-1-yl)carbonyl]indol-3-yl,
6-[(piperazin-1-yl)carbonyl]indol-3-yl,
6-{N-[(2,2,N',N'-tetramethyl)propyl]carbamoyl}indol-3-yl,
6-{N-[(1-ethylpyrrolidin-2-yl)methyl]carbamoyl}indol-3-yl,
6-[(4-methylhomopiperazin-1-yl)carbonyl]indol-3-yl,
6-[(4-butylpiperazin-1-yl)carbonyl]indol-3-yl,
6-[(4-ethylpiperazin-1-yl)carbonyl]indol-3-yl,
6-{[4-(2-(pyrrolidin-1-yl)ethyl)piperidin-1-yl]carbonyl}indol-3-yl,
6-{[N-(3-dimethylamino)prop-2-yl]carbamoyl}indol-3-yl,
6-{N-[3-(imidazol-1-yl)propyl]carbamoyl}indol-3-yl,
6-{[4-(2-hydroxyethyl)piperazin-1-yl]carbonyl}indol-3-yl,
3-[(4-ethylpiperazin-1-yl)methyl]indol-7-yl,
3-[(pyrrolidin-1-yl)methyl]indol-7-yl,
3-[(4-methylhomopiperazin-1-yl)methyl]indol-7-yl,
3-(diethylaminomethyl)indol-7-yl,

3-{[N-(2-N'N'-dimethylaminoethyl)-N-methyl]aminomethyl}indol-7-yl,
3-[(4-piperidinopiperidin-1-yl)methyl]indol-7-yl,
3-(2-piperidinoacetyl)indol-7-yl,
3-[2-(pyrrolidin-1-yl)acetyl]indol-7-yl,
3-(2-diethylaminoacetyl)indol-7-yl,
3-[2-(4-methylpiperazin-1-yl)acetyl]indol-7-yl,
3-[2-(4-methylhomopiperazin-1-yl)acetyl]indol-7-yl,
3-(2-morpholinoacetyl)indol-7-yl,
3-{2-[(2-methoxyethyl)amino]acetyl}indol-7-yl,
3-{2-[(2-piperidinoethyl)amino]acetyl}indol-7-yl,
3-{2-{[3-(imidazol-1-yl)propyl]amino}acetyl}indol-7-yl,
6-[3-(carboxypropyl)oxy]indol-3-yl,
6-{3-[(4-methylhomopiperazin-1-yl)carbonyl]propyloxy}indol-3-yl,
6-[(2-homopiperidin-1-yl)ethyloxy]indol-3-yl,
6-[(2-diethylamino-1-methyl)ethyloxy]indol-3-yl,
6-{2-[(tetrahydropyran-2-yl)oxy]ethyloxy}indol-3-yl,
6-[(2-hydroxyethyl)oxy]indol-3-yl,
6-[2-(isopropyloxyl)ethyloxy]indol-3-yl,
6-[2-(methoxyethyl)oxy]indol-3-yl,
6-[(3-methoxypropyl)oxy]indol-3-yl,
6-[(3-methoxybutyl)oxy]indol-3-yl,
6-{[(N,N-diethylcarbamoyl)methyl]oxy}indol-3-yl,
7-[2-(piperidin-1-yl)ethyloxy]indol-3-yl,
7-[(2-homopiperidin-1-yl)ethyloxy]indol-3-yl,
7-[(2-diethylamino-1-methyl)ethyloxy]indol-3-yl,
7-{2-[(tetrahydropyran-2-yl)oxy]ethyloxy}indol-3-yl,
7-[(2-hydroxyethyl)oxy]indol-3-yl,
7-[2-(isopropyloxyl)ethyloxy]indol-3-yl,
7-[2-(methoxyethyl)oxy]indol-3-yl,

7-[(3-methoxypropyl)oxy]indol-3-yl,
7-[(3-methoxybutyl)oxy]indol-3-yl,
7-{[(N,N-diethylcarbamoyl)methyl]oxy}indol-3-yl,
7-(dimethylaminomethyl)-6-[(2-piperidin-1-yl)ethyloxy]indol-3-yl,
7-(dimethylaminomethyl)-6-[(2-homopiperidin-1-yl)ethyloxy]indol-3-yl,
7-(dimethylaminomethyl)-6-{2-[(tetrahydropyran-2-yl)oxy]ethyloxy}indol-3-yl,
7-(dimethylaminomethyl)-6-[(2-hydroxyethyl)oxy]indol-3-yl,
7-(dimethylaminomethyl)-6-[2-(isopropyloxyl)ethyloxy]indol-3-yl,
7-(dimethylaminomethyl)-6-[2-(methoxyethyl)oxy]indol-3-yl,
7-(dimethylaminomethyl)-6-[(3-methoxypropyl)oxy]indol-3-yl,
7-(dimethylaminomethyl)-6-[(3-methoxybutyl)oxy]indol-3-yl,
7-[(pyrrolidin-1-yl)methyl)]-6-[(2-piperidin-1-yl)ethyloxy]indol-3-yl,
7-[(pyrrolidin-1-yl)methyl)]-6-[(2-homopiperidin-1-yl)ethyloxy]indol-3-yl,
7-[(pyrrolidin-1-yl)methyl)]-6-{2-[(tetrahydropyran-2-yl)oxy]ethyloxy}indol-3-yl,
7-[(pyrrolidin-1-yl)methyl)]-6-[(2-hydroxyethyl)oxy]indol-3-yl,
7-[(pyrrolidin-1-yl)methyl)]-6-[2-(isopropyloxyl)ethyloxy]indol-3-yl,
7-[(pyrrolidin-1-yl)methyl)]-6-[2-(methoxyethyl)oxy]indol-3-yl,
7-[(pyrrolidin-1-yl)methyl)]-6-[(3-methoxypropyl)oxy]indol-3-yl,
7-[(pyrrolidin-1-yl)methyl)]-6-[(3-methoxybutyl)oxy]indol-3-yl,
6-[(2-homopiperidin-1-yl)ethyloxy]-7-azaindol-3-yl,
6-[(2-diethylamino-1-methyl)ethyloxy]-7-azaindol-3-yl,
6-{2-[(tetrahydropyran-2-yl)oxy]ethyloxy}-7-azaindol-3-yl,
6-[(2-hydroxyethyl)oxy]-7-azaindol-3-yl,
6-[2-(isopropyloxyl)ethyloxy]-7-azaindol-3-yl,
6-[2-(methoxyethyl)oxy]-7-azaindol-3-yl,
6-[(3-methoxypropyl)oxy]-7-azaindol-3-yl,

6-[(3-methoxybutyl)oxy]-7-azaindol-3-yl,
6-{[(N,N-diethylcarbamoyl)methyl]oxy}-7-azaindol-3-yl,
6-{4-(2-hydroxyethyl)piperazin-1-yl]methyl}indol-3-yl,
6-[(4-methylhomopiperazin-1-yl)]methylindol-3-yl,
6-[(4-piperidinopiperidin-1-yl)methyl]indol-3-yl,
6-{[3-(isopropyloxy)propyl]aminomethyl}indol-3-yl,
6-{[3,3-bis(ethyloxy)propyl]aminomethyl}indol-3-yl,
6-[(2,2-dimethyl-1,3-dioxolane-4-methane)aminomethyl]indol-3-yl,
6-{3-[(2-methoxyethyl)oxypropyl]aminomethyl}indol-3-yl,
6-{[3-(ethyloxy)propyl]aminomethyl}indol-3-yl,
6-[3-(butyloxy)propyl]aminomethyl]indol-3-yl,
6-[(3-methoxypropyl)aminomethyl]indol-3-yl,
6- (chloromethylcarbonyl)indol-3-yl,
6- [2-(isopropyloxyethyl)aminomethylcarbonyl]indol-3-yl,
6-{[(2-piperidin-1-yl)ethyl]aminomethylcarbonyl}indol-3-yl,
6-{[(2-homopiperidin-1-yl)ethyl]aminomethylcarbonyl}indol-3-yl,
6-{4-(2-hydroxyethyl)piperazin-1-yl]methylcarbonyl}indol-3-yl,
6-{[(4-methylhomopiperazin-1-yl)]methyl}carbonylindol-3-yl,
6-[(4-piperidinopiperidin-1-yl)methylcarbonyl]indol-3-yl,
6-{[3-(isopropyloxy)propyl]aminomethylcarbonyl}indol-3-yl,
6-{[3,3-bis(ethyloxy)propyl]aminomethylcarbonyl}indol-3-yl,
6-[(2,2-dimethyl-1,3-dioxolane-4-methane)aminomethylcarbonyl]indol-3-yl,
6-{3-[(2-methoxyethyl)oxypropyl]aminomethylcarbonyl}indol-3-yl,
6-{[3-(ethyloxy)propyl]aminomethylcarbonyl}indol-3-yl,
6-[3-(butyloxy)propyl]aminomethylcarbonyl]indol-3-yl, or
6-[(3-methoxypropyl)aminomethylcarbonyl]indol-3-yl.

27. A method of inhibiting one or more protein kinase activity in a recipient which comprises administering to said recipient a compound of Claim 16.

28. A method of Claim 27 wherein the compound is a mixture of stereoisomers.

29. A method of Claim 28 wherein the stereoisomers are enantiomers.

30. A method of Claim 28 wherein the stereoisomers are E and Z isomers.

31. A method of Claim 27 wherein the compound is a mixture of structural isomers.

32. A method of Claim 31 wherein the structural isomers are tautomers.

33. A method of Claim 32 wherein said tyrosine kinase is selected from the group consisting of KDR, flt-1, TIE-2, Lck, Src, fyn, Lyn, Blk, and yes.

34. The method of Claim 33 wherein the activity of said tyrosine kinase affects hyperproliferative disorders.

35. The method of Claim 34 wherein the activity of said tyrosine kinase affects angiogenesis.

36. A pharmaceutical composition comprising a compound of Claim 16 or a physiologically acceptable salt thereof and a pharmaceutically acceptable diluent or carrier.

acid
A9